Remarks

The Office Action mailed August 26, 2004 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-17 are now pending in this application. Claims 1-11 and 13-17 stand rejected. Claim 12 is objected to. Claims 1, 4, 10, and 13 have been amended. It is respectfully submitted that the presently pending claims recite allowable subject matter.

The specification is amended changing the title of the application, adopting the Examiner's suggestion.

The specification has been amended at page 4 at the first and second paragraphs to correct cierical errors. Specifically, the first paragraph has been amended to reference figure 2 for the location of the mounting opening 46 which is shown in figure 2. The second paragraph has been amended to replace the claim term "said" with the word "the". The amendments add no new matter.

The objection to the specification for failing to provide antecedent basis for claimed subject matter in the specification is respectfully traversed.

The specification has been amended at page 3 in the second paragraph of the Detailed Description of the Invention to include language from original Claim 10 to describe the relationship between the laterally extending ventilation openings 36 and the longitudinal ventilation 28. Specifically, the amendment inserts the language "Laterally extending ventilation openings 36 extend along parabolic channel surface 20 obliquely to longitudinal ventilation opening 28." Since the original claims are a part of the specification, the amendment adds no new matter. Further, the Examiner's interpretation of Claim 10 is correct.

For the foregoing reasons, Applicant respectfully requests that the objection to the specification be withdrawn.

The rejection of Claims 1-8, 10, 11, and 13-16 under 35 U.S.C.§102(b) as being anticipated by Gough (U.S. Patent No. 2,410,211) is respectfully traversed.

Gough describes a portable electric heater including an outer casing (10) having an upper portion that includes a cylindrical parabolic reflector (14) having closed ends. The reflector includes a protective grill (16) and a cylindrical heating element (18) positioned at the focal point of the parabolic reflector. The parabolic reflector includes a plurality of louver-like openings (20), each having a forwardly extending fin portion (22) such that air supplied from the back of the reflector will be directed forwardly in a direction generally parallel to the reflected radiant energy of the heater. The top end of the parabolic reflector may also include a plurality of openings (26) having angularly extending fin portions (28) so that air passing through the openings (26) will be directed forwardly toward the front of the heater. The bottom (42) of the outer casing includes a plurality of openings (44) so that air may be drawn into the interior of the outer casing by a fan (46) operating within a cylindrical member (54). The air from the fan passes upwardly within the cylindrical member into the interior of a chamber and around the sides and top of the parabolic reflector and is discharged through the openings 20 and 26 in the parabolic reflector and through the grill and into a room.

Claim 1 recites a reflective bracket including "a channel comprising a reflective material, a longitudinal axis, and at least one ventilation opening therethrough, said at least one ventilation opening positioned substantially at a bottom of said channel, and configured to prevent a reflection of heat from said bottom of said channel".

Gough does not describe or suggest a reflective bracket that includes a channel including a reflective material, a longitudinal axis, and at least one ventilation opening therethrough, wherein the at least one ventilation opening is positioned substantially at a bottom of the channel, and configured to prevent a reflection of heat from the bottom of the channel. Moreover, Gough does not describe or suggest a ventilation opening positioned substantially at a bottom of the channel, and configured to prevent a reflection of heat from the bottom of the channel. Rather,

Gough describes longitudinal ventilation openings along the side of a channel and no ventilation openings at the channel bottom.

For the reasons set forth above, Claim 1 is submitted to be patentable over Gough.

Claims 2-8 depend from independent Claim 1. When the recitations of Claims 2-8 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 2-8 are likewise patentable over Gough.

Claim 10 recites a reflective bracket including "a channel comprising a reflective material, a longitudinal axis, and at least a first ventilation opening and a second ventilation opening therethrough, said first ventilation opening and said second ventilation opening extending obliquely to one another, said first ventilation opening positioned substantially at a bottom of said channel, and configured to prevent a reflection of heat from said bottom of said channel".

Gough does not describe or suggest a reflective bracket that includes a channel including a reflective material, a longitudinal axis, and at least a first ventilation opening and a second ventilation opening therethrough, the first ventilation opening and the second ventilation opening extending obliquely to one another, and wherein the first ventilation opening is positioned substantially at a bottom of the channel, and configured to prevent a reflection of heat from the bottom of the channel. Moreover, Gough does not describe or suggest a ventilation opening positioned substantially at a bottom of the channel, and configured to prevent a reflection of heat from the bottom of the channel. Rather, Gough describes longitudinal ventilation openings along the side of a channel and no ventilation openings at the channel bottom.

For the reasons set forth above, Claim 10 is submitted to be patentable over Gough.

Claims 11 and 13-16 depend from independent Claim 10. When the recitations of Claims 11 and 13-16 are considered in combination with the recitations of Claim 10, Applicant submits that dependent Claims 11 and 13-16 are likewise patentable over Gough.

For at least the reasons set fourth above, Applicant respectfully requests that the section 102 rejection of Claims 1-8, 10, 11, and 13-16 be withdrawn.

The rejection of Claims 9 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Gough in view of German Patent DE892950 is respectfully traversed.

Gough is described above. DE892950, as best understood, describes a radiant heater with a reflector (2) and a housing (3).

Applicant respectfully submits that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Gough nor DE892950, considered alone or in combination, describe or suggest the claimed combination.

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). In the present case, neither Gough nor DE892950 describe or suggest a ventilation opening in the bottom of a channel. Rather, both Gough and DE892950 describe ventilation openings along the sides of the channel.

Further, Applicant respectfully submits that a closer examination of the prior art would reveal that the prior art teaches away from the present invention. The present invention claims a ventilation opening in the bottom of a channel. By contrast, Gough a parabolic reflector with a heating element at the focal point of the reflector. Louver-like openings 20 with fins 22 are arranged on the sides of the reflector. "The punched out portions remaining as a result of the formation of the openings 20 are each arranged to be on the side of the opening 20 nearest the electrical heating element 18 so as to tend to prevent air from striking directly against the element 18" (col. 3, lines 38-43). Thus, the provision of a ventilation opening substantially at the bottom of the channel would allow air flow to impinge directly on the heater element.

Claim 9 depends from Claim 1 which recites a reflective bracket including "a channel comprising a reflective material, a longitudinal axis, and at least one ventilation opening therethrough, said at least one ventilation opening positioned substantially at a bottom of said channel, and configured to prevent a reflection of heat from said bottom of said channel".

Neither Gough nor DE892950, considered alone or in combination, describe or describe or suggest a reflective bracket that includes a channel including a reflective material, a longitudinal axis, and at least one ventilation opening therethrough, wherein the at least one ventilation opening is positioned substantially at a bottom of the channel, and configured to prevent a reflection of heat from the bottom of the channel. Moreover, neither Gough nor DE892950, considered alone or in combination, describe or suggest a ventilation opening positioned substantially at a bottom of the channel, and configured to prevent a reflection of heat from the bottom of the channel. Rather, Gough describes longitudinal ventilation openings along the side of a channel and no ventilation openings at the channel bottom, and DE892950 describes ventilation holes along the sides of a housing.

For the reasons set forth above, Claim 1 is submitted to be patentable over Gough in view of DE892950.

Claim 9 depends from independent Claim 1. When the recitations of Claim 9 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claim 9 is likewise patentable over Gough in view of DE892950.

Claim 17 depends from Claim 10 which recites a reflective bracket including "a channel comprising a reflective material, a longitudinal axis, and at least a first ventilation opening and a second ventilation opening therethrough, said first ventilation opening and said second ventilation opening extending obliquely to one another, said first ventilation opening positioned substantially at a bottom of said channel, and configured to prevent a reflection of heat from said bottom of said channel".

Neither Gough nor DE892950, considered alone or in combination, describe or suggest a reflective bracket that includes a channel including a reflective material, a longitudinal axis, and at least a first ventilation opening and a second ventilation opening therethrough, the first ventilation opening and the second ventilation opening extending obliquely to one another, and wherein the first ventilation opening is positioned substantially at a bottom of the channel, and configured to prevent a reflection of heat from the bottom of the channel. Moreover, neither Gough nor DE892950, considered alone or in combination, describe or suggest a ventilation opening positioned substantially at a bottom of the channel, and configured to prevent a reflection of heat from the bottom of the channel. Rather, Gough describes longitudinal ventilation openings along the side of a channel and no ventilation openings at the channel bottom, and DE892950 describes ventilation holes along the sides of a housing.

For the reasons set forth above, Claim 10 is submitted to be patentable over Gough in view of DE892950.

Claim 17 depends from independent Claim 10. When the recitations of Claim 17 are considered in combination with the recitations of Claim 10, Applicant submits that dependent Claim 7 is likewise patentable over Gough in view of DE892950.

For at least the reasons set fourth above, Applicant respectfully requests that the section 103(a) rejection of Claims 9 and 17 be withdrawn,

The objection to Claim 12 is respectfully traversed.

Applicant thanks the Examiner for the indication of allowable subject matter in dependent Claim 12. Applicant submits, however, that Claim 12 depends from independent Claim 10 which is submitted to be in condition for allowance. When the recitations of Claims 12 are considered in combination with the recitations of Claim 10, Applicant respectfully submits that dependent Claim 12 is also patentable.

Accordingly, Applicant respectfully requests that the objection to Claim 12 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

Thomas M. Fisher

Registration No. 47,564

ARMSTRONG TEASDALE LLP

One Metropolitan Square, Suite 2600

St. Louis, Missouri 63102-2740

(314) 621-5070